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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,246	02/13/2004	Seung-Yong Hwang	1315-053	4495
22429	7590	02/15/2007	EXAMINER	
LOWE HAUPTMAN BERNER, LLP			HAMO, PATRICK	
1700 DIAGONAL ROAD			ART UNIT	PAPER NUMBER
SUITE 300			3746	
ALEXANDRIA, VA 22314				
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/15/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary	Application No.	Applicant(s)	
	10/777,246	HWANG ET AL.	
	Examiner	Art Unit	
	Patrick Hamo	3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 February 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-10 is/are rejected.
- 7) Claim(s) 1,4-6,8 and 9 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 13 February 2004 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>13 Feb 04</u> . | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION***Drawings***

Figures 1-5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 1 is objected to because of the following informalities: the word "any" seems to be in error for the word "one" in the phrase "at least one of" in line 8.

Furthermore, claims 4-6 and 8-9 are objected to because of the following informalities: the word "of" is missing in the phrase "at least one or more of" in lines 1-2 of each claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shintoku et al., 6,293,768 in view of Ahn et al., 6,068,453.

Shintoku discloses a compressor with a front housing 13 and a rear housing 15 enclosing front 11 and rear 12 ends of a cylinder block, refrigerant gas inlet and outlet ports (fig. 4) on the outer peripheral surface of the cylinder blocks, discharge passageways 29 formed in the front and rear cylinder blocks and connecting to the discharge of the cylinder blocks on one side and to a main expansion portion or muffler space 24 disposed between the two passageways and formed integrally with the cylinder blocks and positioned outside of the cylinder blocks (fig. 1).

However Shintoku does not disclose the following claimed limitations taught by Ahn: a discharge conduit 89 provided to pass through a partition or inner wall 3 isolating suction 75 and discharge 69 chambers, thereby delivering the gas discharged toward the outside of the compressor (fig. 6), an auxiliary expansion portion or outlet chamber 92 communicating with the discharge conduit, the discharge conduit positioned at the shortest distance between the central portion of the discharge chamber and the central portion of its inlet (fig. 6), and that the discharge conduit communicates with the lower face of the outlet chamber or auxiliary expansion chamber (fig. 4) in order to effectively remove noise due to gas pulsation (col. 3, ll. 47-51).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Shintoku with Ahn in order to more effectively remove noise due to gas pulsation (col. 3, ll. 47-51).

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In regards to the claimed limitations that there are front and rear discharge conduits and front and rear auxiliary expansion portions, this constitutes a mere duplication of parts and does not patentably distinguish over the prior art unless a new and unexpected result is produced. See MPEP §2144.04(6)(b).

In regards to the claimed limitations that the auxiliary expansion portion has a volume larger than that of the discharge conduit, that the main expansion portion has a volume larger or the same as a sum of volumes of the auxiliary expansion portions, that the passageway sectional areas of the discharge conduits become increase toward the outlets from the inlets, and that the length between the front discharge conduit and the outlet and the rear discharge conduit and the outlet is the same, these limitations constitute a change in size or proportion that would not perform differently than the prior art devices, and therefore are not patentably distinct from the prior art devices. See MPEP §2144.04(4)(a).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Hamo whose telephone number is 571-272-3492. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg can be reached on 571-272-4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PLF

PH

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EHUD GARTENBERG
SUPERVISORY PATENT EXAMINER